

Amendments to the Specification:

Delete paragraph [0001] and the subtitle CROSS REFERENCE TO RELATED APPLICATIONS.

Paragraph 0003 is amended as follows:

[0003] The use of high[–]frequency ultrasound to determine the anterior to posterior dimensions of the eye is well known. The measured axial length of the eye (distance from the cornea to the retina) is used to calculate the lens implant power to be used in cataract surgery. Although optical methods for measuring the axial length of the eye have been described, ultrasound measurement is the preferred method used by ophthalmologists. The technology and technique for making ultrasound measurements in ophthalmology are disclosed in Coleman, D., *Ultrasonography of the Eye and Orbit*. Lea & Febiger (1977). To make such measurements, a hand-held ultrasound probe is placed in contact with the cornea of the eye. The probe includes a transducer and a separate internal fixation light which the patient is instructed to view. As the patient views the internal fixation light, high frequency ultrasonic waves are reflected off of the back of eye, and these reflections are processed by the transducer and converted to quantifiable distances.

Paragraph 0013 is amended as follows:

[0013] Off Center Problems: The first aspect of achieving the correct ultrasound probe alignment is locating and maintaining the correct contact point between the tip of the probe and the topographical center of the cornea. The desired axis for measuring the axial length of the eye is along the visual axis. This relationship is most accurately described by the axis of Fick. As described in the American Academy of Ophthalmology Basic Science series 2002, Book 6, 2002, the "Y" axis of Fick is a sagittal axis passing through the center of the cornea, pupil and out through the posterior of the eye. To correctly place the tip of the probe on the center of the cornea, it must come in contact with the cornea at a spot that corresponds to the center of the pupil. While performing an ultrasound, the technician is typically positioned to the patient's side looking at the pupil from an oblique angle. Extrapolating the pupil's center from this location can be quite difficult. Typically, the patient's eye is wandering about throughout the measurement

process because the fixation spot inside the prior art probe is too large to confine the movement of the eye as stated above. Since the cornea is a sphere, any off-center positioning of the probe tip will give an erroneously short measurement. In fact, short measurements are the most commonly encountered error seen in ultrasound axial measurements, in part because of the difficulty of visually maintaining the proper orientation orientation of the probe on the moving cornea.

Paragraph 0034 is amended as follows:

[0034] Step one is to assess the intra ocular pressure before starting the procedure. Once the intraocular pressure is noted, the amount of tension applied to the eye can be precisely adjusted titrated as described below.

Paragraph 0059 is amended as follows:

[0059] FIG. 2b displays a close-up of the probe tip 8b and the cornea 64 as and the force vector 67 that occurs when the patient's chin is too low. In this position, the probe tip loses contact with the cornea and therefore no measurements can be taken. For this reason, in addition to the visible space between the cornea and the probe and the abnormal bubble level position, this malposition is easy to recognize. To remedy this malposition, the technician asks the patient to lift their chin up slightly thereby elevating the laser spot 6b, to the proper position as shown in FIG. 1.

Paragraph 0061 is amended as follows:

[0061] FIG. 3b displays a close-up of the probe tip 8b, the cornea 64 and the force vector 66 that occurs when the patient's chin is too high. In this position, the probe tip has excessive force and the cornea is compressed leading to incorrect and short measurements. The tear meniscus in this incorrect position is noted to be convex and located at the extreme edge of the probe tip and "spills over" the side of the probe 63 and 63b. To remedy this malposition, the patient is instructed to lower their chin slightly thereby lowering the laser spot 6b to the proper position as shown in FIG. 1.

Paragraph 0066 is amended as follows:

[0066] Method of Measurement: FIG. 1: First the patient is administered a topical anesthetic drop

in both eyes. The ultrasound device 4 is turned on, calibrated, and the pertinent patient data entered into the device and displayed on the screen 2. The headpiece is placed on the patient's head and the headpiece is snuggly fit by turning headpiece knobs 15 and 16. The laser pointing system 7 is switched on. The patient is instructed to close ~~the~~ both eyes. The ultrasound probe is manually positioned in front of the closed eye to be measured by grasping the carrying platform like a pen and moving it into the correct measuring position, which is directly in front of the eye with both bubble levels in the neutral position.